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Your Reference : 103 41 952.7.44

Applicant : Lurgi AG
Our File Number: : L 1 P 22

Regarding the Examiner's Action from October 30, 2006

We petition to base the remaining proceedings on the amended claims 1 to 4 attached in the enclosure. The amended claims are attached both in a clean copy and in the form of a corrected copy, in which the amendments are highlighted by deletion or bold print. In addition, we enclose duplicate copies of pages 5 to 7 of the description, which have been adapted to the amended claims.

1. In the above action, the novelty of the original claim 1 was questioned. In addition, the inclusion of the transesterification step in claim 2 was proposed. The published prior art D1 to D5 was mentioned as the relevant state of the art.

2. According to the enclosed amended claims 1 to 4, the characteristics of polyalkylene glycols and polyether polyols were deleted from the original claim 1.

Additionally, the characteristic of "in a second stage (transesterification) the

mixture containing the carbonates and carbamates of the polymer alcohols is

reacted with an alcohol or a phenol, forming the carbonates thereof and forming

again the polymer polyalcohols of the formula I or II" was added to claim 2.

Originally, this characteristic was disclosed already on page 4 in paragraph

[0016] of the description (DE 103 41 952 A1).

3. The published prior art D1 to D4 already have described reactions of urea with

polyalkylene glycols or polyether polyols. For an intermediate product, made of a

mixture of organic carbonates and carbamates, which according to the amended

claim 1 is obtained by reacting urea with polyester polyols, or completely or

partially hydrolyzed polyvinyl alcohols, or mixtures of these compounds,

consequently the requirements for novelty are met.

 $4.\ \ \mbox{The characteristic of "in a second stage (transesterification)}$ the mixture

containing the carbonates and carbamates of the polymer alcohols is reacted with an alcohol or a phenol, forming the carbonates thereof and forming again

the polymer polyalcohols of the formula I or II" was added to claim 2 as a second

method-related step.

We anticipate that based on the amended claims submitted now a decision

regarding patentability can be made.

(signed)

Dr. K.- Meyer-Dulheuer

Patent Attorney

Amended claims:

 An intermediate product, comprising a mixture of organic carbonates and carbamates, characterized in that they are produced through the reaction of urea, substituted urea, a salt or ester of carbamic acid, or one of the Nsubstituted derivatives thereof, with

polyester polyols, or completely or partially hydrolyzed polyvinyl alcohols of the general formula II



(Formula II)

wherein R' is an alkyl, aryl or acyl group having 1 to 12 carbon atoms, p and g are numbers between 1 and 20.

- or with mixtures of these compounds, without or in the presence of a catalyst favoring ammonia cleavage.
- A method for producing organic carbonates and carbamates, characterized in that urea, substituted urea, a salt or ester of carbamic acid, or one of the N-substituted derivatives thereof, is reacted
 - in a first stage with polymer multifunctional alcohols, such as polyalkylene glycols, polyester polyols, or polyether polyols having the general formula I



wherein R is a straight-chained or branched alkylene group having 2 to 12 carbon atoms and n is a number between 2 and 20.

or completely or partially hydrolyzed polyvinyl alcohols of the general formula II



(Formula II)

wherein R' is an alkyl, aryl or acyl group having 1 to 12 carbon atoms, p and q are numbers between 1 and 20,

- or dissolved in mixtures of these compounds, without or in the presence of a catalyst favoring ammonia cleavage, into a mixture containing carbonates or carbamates,
- and at the same time the released ammonia or the amine is removed from the reaction mixture by means of a stripping gas and/or steam and/or a vacuum, and
- in a second stage (transesterification) the mixture containing the carbonates and carbamates of the polymer alcohols is reacted with an alcohol or a phenol, forming the carbonates thereof and forming again the polymer polyalcohols of the formula I or II.
- The method according to claim 2, characterized in that the reaction into the intermediate product according to the invention is preferably carried out at temperatures between 100°C and 270°C.

4. A method according to claims 2 and 3, characterized in that

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alkaline reacting salts, oxides, hydroxides, alcoholates having elements of the groups Ia, Ib, IIa, IIb, IIIa, IIIb, IVa, IVb, Va, Vb, VIb, VIIb, VIIIb of the periodic system, basic zeolites, polymer ion exchangers or tetraalkyl ammonium salts, or triphenyl phosphines, or tertiary amines, are employed as catalysts.